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LEADING ARTICLES

THE FEAR OF THE COLD.

BAYARD HOLMES, M. D.

CHICAGO, ILLINOIS.

These are times of standardization. Every child born is dressed in standardized clothes made by the million. He has standardized blocks to play with and goes to a school in which the curriculum is standardized. If he grows up, his habitation as well as his clothes is standardized and so of his furniture. His flat is only one of a thousand just like it. Even his ideas are completely standardized so that you may know his philosophy by his attire. There is not a tendency of modern life so economically necessary as this standardization which prevails in every article manufactured and in the very houses we live in. Our manner of life is dictated by this economic law, and must we come to our subject at last, our manner of death.

In the general standardization there is none more serious than the "hot air" residence. In primitive society the fire was for culinary and sacredotal uses only. The fire-place, the hearth, was sacred because of the later use of the fire. From such a beginning the modern steam plant has gradually developed. The house has become a perpetual hot air bath. The windows are fastened down and often doubled. The heat by means of automatic apparatus is kept at 80 deg. F. in kitchen, living-rooms and sleeping rooms, day and night. In such rooms the women and children live and die. They are not out of doors two hours a day. They dress as for summer all the year round. There are no adequate means of ventilation in the modern house, much less in the modern flat. Women and children have colds, catarrh, indigestion and nervous troubles the year round. The children kick off the clothes and cry at night and are fretful and unhappy by day. Many other serious physical troubles follow the heated residence. The factory, store and office are equally hot. The men follow close on the women in taking on the course of the hot house.

When at last one of the residents of such a house has consumption he is put out into a tent, in the cold to get well. Once in a while a woman who has completely collapsed and is a nervous wreck is similarly treated and gets strong again. She goes home to the hermetically sealed flat to a sure relapse. It has gone so far now that most physicians urge the open house for consumptives, pneumonia patients and babies. They recognize that constant cold fresh air saves these folks. Even the rheumatic is called by some doctors the minister of cold air and cold water. It is not air alone that cures but cold and air.

The architects recognize that fashion rules in buildings as well as in dress. The flat or apartment is now in demand. In a way it is an economic necessity. It is cheaper to have six families on one twenty-five-foot lot than one. One engineer, electrician and janitor will do better by those six families in flats than any one of them could afford in a house. The standard of life has been raised without any increase in expense. But that which cost nothing in the house, cold fresh air is unobtainable in the flat. The circulation of hot dead air begins on the first of October and continues until the first of June from the basement to the top flat. The hot air furnished in the first floor oozes through walls and floors and comes out of every crack from baseboard to ceiling gradually creeping up to the roof. The halls are hot chambers of communication for all the smells which distinguish our international city population. Thous-

ands of tenents vie with each other in bidding up the rent on these palaces of cliff dwellings and find an exquisite comfort in the winter's hot air bath which spells inevitable invalidism.

The present antituberculosis craze is a marvel of social power and possibility. All social movements are rapid. Athens was a city of wooden huts when Socrates was a boy. When he drank the hemlock it was a city of marble palaces adorned with the sculpture of Phidias. It is possible that such a rapid change could come in modern architecture and all our miles of flats become rubbish.

The necessities of life are few, but first among them is ten or more chests full of fresh air every minute.

The public conscience generally is aroused to the necessity of furnishing potable water in abundance. Even the condition of milk and food is subject to special legislation and special police investigation. But air so much more necessary, so much cheaper and freer is despised and neglected. The children when there any, are not allowed to breath cold air. They all have adenoids.

Every sleeping room should be a loggia with a dressing-room attached. The loggia should be protected from observation from without and from any danger that children would fall over its balustrades. There the flat dwellers could put their babies from the afternoon nap and at night at least the whole family could breath fresh cold air.

It is remarkable that so sanitary a condition as cold sleeping rooms has not come into fashion. Doctors generally recognize the desirability of cold fresh air for sleeping rooms. It would save coal and increase the sale of blankets. The probability is that people who are all day in hot dry dehydrated air are actually uncomfortable in cold, relatively humid air at night. The mucous membranes of the respiratory tract, the air vesicles, the muscles of respiration and perhaps the blood corpuscles themselves are not adapted to sleeping in the cold But should they keep up the experiment a week they could never return to the stuffy parched air of the steam heated sleeping box. The coal consumed in raising the air from 65 deg. F. to 75 deg. F. is more than twenty per cent for each of the last five degrees. The hydration falls from the normal comfortable and healthy condition of about 60 per cent to less than 30 per cent which exceeds the dehydration of the desert simoom. The modern dislike of babies and even of wives is not due wholly to their expense and the difficulty which men have of earning a living. It is not wholly an economic necessity to do without children and wives, but it is a result of trying to raise children in hot houses and live in them with a wife. The women and children become so irritable and miserable, so sick in fact that they give adequate reason for the present conditions. The dehydrated air at 75 deg. F. or higher is not subjectively as warm as a room warmed to 65 deg F. with the hydration at 60 per cent of saturation. The flat dwellers want more heat and not less.

DIFFUSE INFILTRATING CARCINOMA OF THE STOMACH.*

JNO. M. RELL, M. D.

ST. JOSEPH, MO.

This paper is presented, not so much on account of the rarity of the disease, but to call attention to, first, early diagnosis of cancer; second, method of diagnosis; third, the advantage of the microscope as a diagnostic agent. In gastro-intestinal medicine pathognomonic symptoms are worth no more nor less than in general medicine, and by the time the symptomatology becomes classic the disease is well established. When this point is reached in gastric cancer all hopes for recovery have passed, hence the necessity of anticipating this development.

Cancer of the stomach is always primary, this is the case with cancer of the digestive tract generally. It selects the sphincters, the cardia, the pyloris, the ilio-cecum, the sigmoid flexure, and the rectum. It is usually preceded by trauma or ulceration, but the history of many cases point a still unknown origin.

A number of cases, almost a majority, come with a history of only three or four months of gastric symptom such as vomiting, pain, distress after eating, one or all in contradistinction ot the generally expected history of a long preceding illness. In fact, when there is a history covering long periods carcinoma is the thing last anticipated. Therefore, either these cases progress without any perceptible symptoms, until breaking down begins, or else they follow a rapid course immediately upon implantation.

A number of methods have been suggested for its early detection, such as chemical alteration of the blood in its reaction and in altered morphologic elements, serum tests, but these have proved of no real value. In following beaten lines

*Read before the St. Joseph-Buchanan County Medical Society, October 13, 1909.

one is misled by an irregular exhibition of symptoms, and a lack of those seemingly essential. For instance, in the case cited below, there was a complete absence of a mass and rectus-rigidity, being one of those infiltrating cases which spreads itself over large territory, no tumor being formed. Coffee ground vomit cannot be depended upon, since blood from any source in the stomach may become digested, or, on the other hand, the pyloris be not involved and no vomiting at all take place. Traditional severe pain is misleading, it frequently occurs only late in the disease, and if the lesion escape large nerve trunks it may be lacking altogether. The absence of HCl is not a factor in all cases. Cohnheim and Ewalt report cases of cancer with excessive HCl. The case cited had a fair percentage of hydrochloric acid and no lactic acid at all.

The factors most trustworthy from a purely clinical standpoint are: rapid loss of flesh, plus some gastric symptoms, and age. I saw a case with Dr. Jacob Geiger a year ago in which the diagnosis was based on this combination, and subsequent events proved it to be correct. The man refused operation and died two months later with all symptoms beautifully developed. Age, however, is not to be depended on categorically, since cases are recorded occurring in youth. If other symptoms are suggestive of cancer, age lacking, the diagnosis should not be withheld.

I have learned to depend upon the microscope for the determining element in cases whose symptoms are suggestive, but yet undeveloped, and believe a diagnosis is possible earlier with it than without it. The scheme I have followed allows of an earlier diagnosis than has heretofore been possible, in my practice at least.

After twenty-four hours fast the stomach is emptied by expression so that the contents are not diluted and are, therefore, concentrated morphologically. An immediate analysis is made by a trained microscopist. The point of most importance in this report is the presence of necrotic tissue, no matter how small. The Boas-Appler bacillus, heretofore considered pathognomonic is found also in stagnant cases, sarcinae likewise. Bits of healthy tissue sucked up from a non-malignant ulcer are disregarded.

In my routine examination I have learned to regard necrotic tissue as particularly suggestive, even before clinical symptoms point to a suspicion of cancer, and in every case which has submitted to operation it has been confirmed. This proved so in the case cited in which no other symptoms presented, and in which three was a conspicuous absence of any of the classically suggested points; no coffee ground vomit, no rapid loss of flesh, no cachexia, and no severe pain. There was, however, a localized pain point, gnawing spells, when the stomach was emptied, and a blood reaction suggestive of ulcer.

January 12, 1909, Dr. H. R. C., a veterinarian, aged 65, consulted me for stomach trouble that had persisted for several years and exhibited symptoms of chronic ulcer, namely, localized pain, two inches below the epigastric notch, inability to eat without distress, except eggs and milk and, while the appetite was fair and constant, there was fear of eating, because of burning and distress after the stomach had emptied itself.

Examination showed HCl .120 per cent, blood serum, no lactic acid, no retention of foodstuffs. He was put under treatment for chronic ulcer. After two weeks of well directed treatment, conscientiously followed, the symptoms had not abated and the gastric findings remained the same. He was then starved for twenty-four hours, the contents epxressed and submitted to Dr. C. A. Good for a search for morphological elements. It revealed small articles of necrotic tissue, which were not foodstuffs, and could be accounted for on no other basis than that of a degenerating ulcer indicating malignancy.

An exploratory incision was advised. Dr. O. B. Campbell in consultation examined the case and concurred in the diagnosis. After several days of preparation and rectal feeding the abdomen was opened by Dr. Campbell. Although the patient's condition was not particularly promising, having been overworked all winter, he elected operation rather than months of suffering, which could only terminate fatally.

The operation revealed an infiltrated area, superficial, with some slight thickening, beginning at the pyloris and extending backward along the greater curvature, fan-shaped, for three notches. The pyloris was about three-fourths occluded. Dr. Campbell made a pylorectomy and gastro-jujenostomy.

The patient rallied fairly well, fluids passed in the orifice, and ultimate recovery appeared probable, but on the third day evidence of urinary suppression presented, which could not be overcome, and on the fifth day the patient passed away with uremic coma.

An autopsy was made the following day and revealed the opening patulous, the per-

itoneum well healed, the wound free from leakage, but the kidneys very much congested.

This case, while not promisng, due to lack of inherent vitality, illustrates a possibility of early operation in selected cases. While not a success from the standpoint of mortality tables it is cited for its diagnostic features, and at a subsequent meeting I have other cases of carcinoma diagnosed by the same procedure to report, which turned out more pleasantly for the patient.

The microscopic chart is appended.

DESCRIPTION OF STOMACH.

The specimen was removed in alcohol. It consisted of a portion of the pyloric end of the stomach, the pylorus, and a portion of the duodenum.

The thickness of the stomach and duodenal walls were uniformally, though not greatly increased. The greatest thickness was found in the stomach inside the pylorus. There was no distinct tumor to be seen with the naked eye and after hardening there was little difference to be seen between different parts of the mucosa, although in the region of the pylorus both in stomach and in the duodenum, the velvety appearance was lost and the surface appeared somewhat ragged and discolored.

Sections were taken from the following regions, viz.: From the extreme upper cut edge of the stomach, from the stomach inside the pylorus, from the pylorus, from the duodenum below the pylorus and from the etxreme lower cut edge of the duodenum.

In the sections from the pyloric region of the stomach and duodenum the glands and lining epithelium of the mucosa are gone and we find a new growth consisting of epithelial cells irregularly grouped and report separated by small partitions of connective tissue containing blood vessels. The surface towards the lumen of the gut is covered with a thin necrotic layer. There is a great deal of small round celled infiltration. The epithelial cells of the tumor are of the small columnar or cylindrical cell type, like those arising from the epithelium and glands of the gut. The epithelial new growth extends down to and infiltrates the muscular layer.

In the section from the extreme upper cut edge of the stomach this same new growth is seen infiltrating the submucosa and muscular layers while the mucosa with its glands is intact. The latter is infiltrated with many small round cells, and the glands are distorted.

This tumor departs from the usual type of stomach carcinoma in that is did not cause any great thickening of thetwalls and did not at any place project above the surface of the mucosa, but did infiltrate the walls of the stomach for a distance measured at least by inches, leaving the mucosa intact. We could apply to it the name diffuse infiltrating carcinoma of the stomach.

SURGICAL EPONYMS.*

MARTIN HAGEN, M. D.

CHICAGO, ILL.

(Continued from page 424.)

Hagedorn, Werner (1831-1894), German surgeon, Westhausen. Operations; 1. For single complete harelip. 2. For double complete harelip.

Haighton, John (1755-1823), English; surgeon, London. Operation, division of the infraorbital nerve for tic douloureux.

Hancock, Henry (1809-1880), English; surgeon and anatomist, London. Operations: 1. For glaucoma. 2. Excision of the ankle-joint.

Handyside, Peter David (1808-1881), Scotch: surgeon, Edinburg. Operation, ovariotomy,

Harrison, Reginald (1839-1908), English; surgeon, Liverpool. Operations: 1. Internal urethrotomy. 2. Puncture of the bladder through the prostate gland.

Hasner Joseph Ritter von (1819-1892), German; ophthalmologist, Prague. Operation, blepharoplasty.

Heaton, George (1808-1879), American; surgeon, Boston. Operation, radical cure of inguinal hernia.

Hegar, Alfred (1830-), German; obstetrician. Operations: 1. Amputation of the cervix. 2. Perineorrhaphy. 3. Oophorectomy. 4. Colporrhaphy.

Heine, Karl Wilhelm Ritter (1838-1877), Hungarian; surgeon, Prague. Operation, see Heiue-Mayer.

Heine-Mayer, q. v. Operation, osteotomy.

Heineke Walter Herman (1834-1901), German; surgeon, Greifswald. Operations: 1. Pyloroplasty. 2. For exostosis of the external auditory meatus.

Henry, Morris Henry (1835-1895), English; surgeon, New York. Operation, for varicocele.

Herophilus of Bethynian (344 B.C.- ?). Operation, extraction of the crystalline lense for the cure of cataract.

Hey, William (1736-1819), English; surgeon, Leeds. Operations: 1. Disarticulation

*Additions and corrections will be gratefully received.

of the metatarsus from the tarsus. 2. Amputation of the leg at the middle third.

Hicks, John Braxton (1823-1897), English; obstetrician, London. Operation, method of version.

Hildanus, Fabricius [(1560-1634) see Fabricius Gulielmus].

Hilton, John (1804-1878), English; surgeon, London. Operations: 1. Method of opening abscess. 2. Amputation of the penis. 3. For fissure of the anus. 4. Obturator herniotomy.

Himly Karl (1772-1837), German; ophthalmologist, Gottingen. Operations: 1. For corectopy. 2. For iridodialysis. 3. For symblepnaron.

Hippel, Arthur von (1741-), German; ophthalmologist, Giessen. Operation, transplantation of cornea.

Hippocrates (4 0-377), Greek; the father of medicine; also a surgeon. Operations: 1. Method of treating fistula in ano. 2. Method of reducing dislocations. 3. Operation on hemorrhoids by the "red-hot iron." 4. Trephining the skull. 5. Method of amputating.

Hodgson, Joseph (1788-1869), English; surgeon, London. Operations, 1. Ligation of the axillary artery. 2. Ligation of the femoral artery.

Hoin, Jean Jacques Louis (1722-1772), French; surgeon, Dijon. Operations: 1. Lithotomy 2. Amputation at the knee-joint.

Holt, Bernard (1816-1894), English; surgeon, London. Operations: 1. Internal urethrotomy. 2. Reducing dislocation of the inferior maxilla.

Horner Johann Friedrich (1831-1886), Swiss; ophthalmologist, Zurich. Operations: 1. For cicatricial ectropion. 2. For salivary fistula.

Hueter, Karl (1838 1882), German; surgeon, Greifswald. Operations: 1. Excision of the elbow-joint. 2. Method of tenorrhaphy. 3. Operation on the facial nerve through an incision in front of the pinna. 4. Excision of the hip joint. 5. Formation of a new columna nasi. 6. Method of closing triangular defects of lips. 7. Excision of the shoulder. 8. See Langenbeck Hueter.

Huguier, Pierre Charles (1804 - 1874), French; surgeon, Paris. Operations: 1. Lumbar colotomy. 2. Trachelectomy. 3. Osteoplastic resection of the superior maxilla. 4. For iridodialysis. 5. For nasopharyngeal tumor

Hulke, John Witaker (1830-1895), English; ophthalmologist, London. Operation, for fistula of the lacrymal gland.

Hunter, John (1728-1793), English; surgeon, London. Operations: Ligating the femoral artery in Hunter's canal for the cure of aneurism in the popliteal space. 2. Method of ligating artery for aneurism. 3. Internal urethrotomy. 4. For trichiasis.

Indian Method. Extraction of the lens in its capsule.

Indian Operation. Plastic formation of nose by a flap from the forehead.

Isreal, James (1848-), German; surgeon, Berlin. Operations: 1. Meloplasty. 2. Method of reaching the liver. 3 Prostatectomy.

Italian Operation. Plastic formation of nose by a flap from the arm. (Probably devised by Gasparo Tagliacozzi.)

Jacobson, Ludvig Levin (1783-1843), Danish; surgeon, Copenhagen. Operation, lithotomy.

Jacques, Frère (see Baulot, Jacques).

Jaeger, Michael (1795 - 1838), German; ophthalmologist, Würzburg. Operations; 1. For ectropion. 2. Method of excising the tongue. 3. Extraction of cataract. 4. For ectropion of the upper lid. 5. For entropion. 6. For trichiasis. 7. Excision of the elbow.

Joerg, Johan Christian Gottfried (1779-1856), German; obstetrician, Köningsberg. Operation, laparo-elytrotomy.

Jaesche, George Emanuel (1815 - 1876), Russian; surgeon, Nishni-Novgorod. Operations: 1. See Arlt-Jaesche. 2. Plastic closure of a triangular defect.

Jobert, Antoine Joseph (de Lamballe) (1799-1867), French; surgeon, Paris. Operations: 1. Method of enterorrhaphy. 2. Ligation of the popliteal artery.

Jones, John (1727-1791), American; surgeon, New York. Operation, lithotomy.

Jurine, Louis (1751-1819), Swiss; surgeon, Geneva. Operation, iridotomy.

(To be continued)

PHYSICIANS TEACH PEOPLE HOW TO DISPENSE WITH THEIR SERVICES.—"I fear the weekly meeting of the San Antonio Board of Health will degenerate into a roll call and a motion to adjourn if the healthful and sanitary conditions of the city continue," declared Dr. S. Burg at a meeting of that board lsst Thursday. "Our inspectors are so vigilant, the public is so careful, and the climate is so perfect that there is very little for the Board of Health to do. In my experience I cannot recall when San Antonio has been so free from sickness. There are few infectious and contagious diseases, fewer complaints from residents of unsanitary conditions and a 7 per 1,000 death rate. This makes it difficult to stir up any considerable business for a health board."

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EDITORIAL

A Contribution to the Study of Tremors.

Dr. M. Neustaedter makes an interesting contribution to the study of tremors,* the particular feature of which is the method of producing a characteristic curve of each form of tremor. He says: "If we clinically observe many forms of tremors and in their pathology we find that various forms of tremors are accompanied by lesions at different sites, tracings of these phenomena, or as Eshner terms them "tremograms," ought to produce characteristics peculiar to each form of this affection. And I venture to say here that for the first time in the history of these investigations I have been successful in the production of curves that give absolute characteristics of each form of tremor." Others have attempted to do this, but have encountered difficulties, firstly, because of their unsuitable apparatus and, secondly, because they overlooked the fact that the part of which the record is made must be placed in a comfortable position so as not to interfere with the muscles involved and to exclude those not involved. The author describes the apparatus he has devised and the manner in which he proceeds to obtain a tremogram. He has made in all 328 tremograms, including the following diseases associated with tremors: paralysis agitans, multiple sclerosis, hemiplegia, epilepsy, alcoholism, chorea, hemi. chorea, hysteria, cerebrospinal syphilis, dementia paralytica, and dementia praecox. The paper is illustrated with fourteen cuts, the first of which pictures the apparatus and the others the characteristic curves indicative of the pathological lesions of brain or spinal cord producing them. Each of these tremograms is fully discussed by the author who says, in conclusion, that (1)the differences between different tremors are of kind, not of degree, and every form of tremor is distinctive of a form or group of diseases. (2) No definite relation exists between one form of tremor and any other. (3)The frequency of movements has no bearing upon the character of the tracing. (4) There is no material difference between the movements of the two sides of the body.

* Medical Record, July 17, 1909.

The Treatment of Pulmonary Tuberculosis Based Upon the Assumption that the Dietetic Cause of the Disease is Lime Starvation.

John F. Russell, of New York, reports the results of his treatment of dispensary patients on the theory that the cause of tuberculosis is insufficient lime salts in the food.* To supply this need he made use of clotted milk and eggs, and later of milk and eggs mixed with hydrochloric acid. He believes that it is necessary to have in the patient's stomach lime salts, hydrochloric acid, and pepsin ferment, while the pancreatic ferment is working normally. The use of clotted milk brought about a plastic pleural effusion about the location of the tuberculosis, which ended in a cure of the lesion. The patients were taught to expect this and to hail the pleuritic pain as a sign of coming cure. The hydrochloric acid and milk was prepared at the dispensary, where a portion was drunk, and the remainder was taken at home morning and night. The patients were encouraged to continue their work, and rest treatment was not given. An attempt to give more lime salts by the use of ground bone had no results. Lime starvation may be due to absence of gastric juice, or to taking food poor in lime. The hydrochloric acid activates the rennet zymogen and the pepsin zymogen, and stimulates secretion of pancreatic juice. The administration of the acid causes decided improvement of general condition. Illustrative cases are given. The result gave promise of an improvement of treatment of tuberculosis in the home climate.

In subsequent number of the same journal† he goes further into the discussion of the hypothesis that the cause of pulmonary tuberculosis is lime starvation. He makes it evident that lime starvation may be due to absence of lime in the food, or to absence of acid in the diet, preventing the assimilation of the lime when taken into the stomach. Milk contains the largest amount of lime salts in it of any food, and casein

* Medical Record, November 27, 1909.
† Medical Record, December 18, 1909.

is the most easily digested albumenoid. Any means that shall aid the assimilation of the element is of value in treatment. Acid will aid assimilation. He shows that lime starvation is equally present at all ages; that this condition favors the growth of tubercle bacilli;.and how lime starvation is produced. The most prevalent disease of childhood, rickets, is dependent on deficiency of lime. It may occur later in childhood, the earlier effects showing most in the bones, the later ones in the nervous system. Lime phosphate absorbed from the alimentary canal must make certain organic combinations so as to be used as building material. An insufficient suply of lime will result in imperfectly developed organs, lowered resistance to disease, and lack of power to repair waste and injury. Rennet occurs in the stomach free or as inactive zymogen, transformed into the active forms by acids. Lime starvation soon follows the absence of free acids. Rickets and conditions which lead to lime starvation, such as pregnancy, lactation, and prolonged fevers, are very apt to be followed by tuberculosis. Rickets and scurvy have a common cause, lime starvation. Administration of food containing acids, benefits both diseases. In feeding infants milk is the natural food it contains lime, casein, and citric acid. The action of rennet is destroyed by diluting milk with water, adding too much alkali, or sterilizing the milk. Improvement in such infants follows the giving of raw milk and foods containing acids. Lime starvation may be a menace from birth to extreme old age. Lime is essential to cell growth, its lack is the cause of many diseases;without the action of rennet and the combination of lime and casein, lime starvation occurs.

Dr. O. H. Brown, who has been for some time in charge of the very successful work which is being done at the Tuberculosis Sanatorium at Mt. Vernon, has resigned from that institution, and is returning to St. Louis. He will be located in the Humboldt Building.

Dr. Joseph Grindon has been chosen a corresponding member of the Societe Francaise de Dermatologie et de Syphiligraphie. There are only eleven members of this society in the United States, there being six in New York, two in Philadelphia and one each in Boston and Chicago. Dr. Grindon is the first to be chosen from St. Louis.

THE ANNUAL MEETING OF THE ST. LOUIS MEDICAL SOCIETY,

The annual meeting of the St. Louis Medical Society, held on Monday, December 27, was unusually successful in every way. The attendance was large, both of members and of guests; of the latter the greater number were ladies. The meeting opened with the reports of the president, the treasurer and the chairmen of committees. An interesting and instructive address followed on "Aboriginal Surgery," by Dr. H. M. Whelpley, illustrated by lantern slides of osteologic and other specimens. A musical program then engrossed the Society's attention. The numbers were as follows:

Violin Solo—Miss Hall.
Vocal Solo—Mrs. Paul Y. Tupper, accompanied by Mr. Alfred Robyn.
Violin Solo—Mrs Walter E. Handley.
Piano Solo—Miss Rivers.
Vocal Solo—Mrs. William McCandless.
Vocal Solo—Dr. August Milner, accompanied by Mr. Charles Galloway.

Mrs. Williard Bartlett was to have sung but, to the regret of all, was prevented by illness from participating.

The lights were then turned out and the results of the election of officers were thrown upon the screen behind the president's chair It appeared that Dr. Henry Schwartz had been chosen president and Dr. Carroll Smith re-elected secretary, both by large majorities. Drs Koetter, Morfit, Nicholson and Sauer were elected to the council; Drs Behrens, Hemplemann, Rassieur, Bartlett, W.Baumgarten and Grindon were chosen delegates to the State Society and Drs. Homan, E. L. Dorsett, W. G. Moore, Luedde, Koetter and Elmer alternates. The vote it appeared had, except for the offices of president and secretary, been very democratic, not to say scattering. This was particularly the case on the nominating ballot. Some six hundred different men were nominated for the eighteen offices to be filled, nearly five hundred of these being for the position of delegates and alternates alone. Over three hundred and fifty votes were cast at the election, about fifty-three per cent of the total active membership. Only fifteen votes had to be thrown out, on account of faulty endorsement, a considerable improvement over last year.

At the close of the meeting, the society adjourned to the rooms of the Medical Library where a reception was tendered the members and guests by Dr. C. M. Nich-

olson, the out-going president. The function was most enjoyable and formed a fitting close to a very succesful administration.

Death of Dr. Valentine.—Dr. Ferdinand C. Valentine died at his home in New York on December 13th. Dr. Valentine came originally from St. Louis, having taken his medical degree from the old Missouri Medical in 1876. The St. Louis profession has always felt a considerable degree of pride in considering him as still belonging to us; his great success and advancement to the fore-front of America's urologists imparted to us a degree of reflected glory. His death came so unexpectedly that it was a great shock. The American profession has met a tremendous loss.

The American Society of Tropical Medicine.—The seventh annual meeting of this society will be held in St. Louis on Saturday, June 11, 1910. Those who intend to be present at this meeting are requested to communicate at once with the secretary, Dr. John M. Swan, of Philadelphia, who would like to receive as early as convenient the titles of papers to be read at this meeting. Those who are unable to be present are requested to send papers which may be read either by title or by proxy and published exclusively under the imprimatur of the society.

The Medical School of Formosa.—The catalogue just issued by the Medical School of the Formosan Government shows a total enrollment of 176 students. The expenditure for the year was 117,088 yen ($58,522), which is included in the annual budget. This school was established in April, 1899, and has for its purpose the education of Chinese for public physicians. Upon graduation the young men are assigned to various prefectures throughout the island, and they are very useful in creating a higher regard for sanitation and public health. The students are admitted upon a competitive examination, to which they are eligible subsequent to their graduation from the public school. The course of instruction covers a period of five years, and the faculty consists of thirteen members. All the professors are Japanese and the Japanese tongue is the only language heard during the entire five years' study. The total number of the graduates since the founding of the school is 120. The hospital of the Red Cross Society is attached to this school.

THE REVIEWER'S TABLE

Books, Reprints, and Instruments for this department, should be sent to the Managing Editor, Century Building, St. Louis.

The Practitioners' Visiting List for 1910. An invaluable pocket-sized book containing memoranda and data important for every physician, and ruled blanks for recording every detail of practice. The Weekly, Monthly and 30-Patient Perpetual contains 32 pages of data and 160 pages of classified blanks. The 60-Patient Perpetual consists of 256 pages of blanks alone. Each one in wallet-shaped book, bound in flexible leather, with calendar for two years. Philadelphia and New York: Lea & Febiger, Publishers. (Price, by mail, $1.25. Thumb-letter index, 25 cents extra.)

Being in its twenty-sixth year of issue, The Practitioners' Visiting List embodies the results of long experience and study devoted to its development and perfection.

It is issued in four styles to meet the requirements of every practitioner: "Weekly," dated for 30 patients; "Monthly," undated for 120 patients per month; "Perpetual," undated, for 30 patients weekly per year, and "60 Patients," undated, for 60 patients weekly per year.

The text portion of The Practitioners' Visiting List for 1910 has been thoroughly revised and brought up to date. It contains among other valuable information a scheme of dentition; tables of weights and measures and comparative scales; instructions for examining the urine; diagnostic table of eruptive fevers; incompatibles, poisons and antidotes; directions for effecting artificial respiration; extensive table of doses; an alphabetical table of diseases and their remedies and directions for ligation of arteries. The record portion contains ruled blanks of various kinds, adapted for noting all details of practice and professional business.

Printed on fine, tough paper suitable for either pen or pencil, and bound with the utmost strength in handsome grained leather, The Practitioners' Visiting List is sold at the lowest price compatible with perfection in every detail.

Functional Diagnosis. The Application of Physiology to Diagnosis. By Thos. G. Atkinson, M. D., Associate Professor of Neurology and Physiology, Chicago College of Medicine and Surgery, etc. Cloth; 213 pages. Chicago Medical Book Co., Publishers.

This is one of several practical books which have been contributed by this author, books which are so evidently presented with the one purpose of giving information which should be easily accessible to medical students and which, when so presented, adds materially to their interest and enthusiasm in their work. The author's experience as a teacher has convinced

him of the necessity of more emphasis on applied physiology, he believes that it should be strongly accentuated in the work of each of the special branches repeated, reiterated and reviewed until the student has adopted it as a feature of his medical thought. As a teacher of medical students we know that he is right and we could wish nothing better for our classes than they had been brought up on such diet.

The book is very complete, it is full of valuable information well put, so well presented that the reader must carry useful points with him, even though he gives the book ever so brief attention. Its pointed paragraphs make it appeal to the practitioner as well as the student and we believe that it will appeal to both classes of readers and work to their great benefit.

Primer of Sanitation. For Use in Public and other Schools. By John W. Ritchie, Professor of Biology, College of William and Mary, Virginia. Cloth. Illustrated, Yonkers, N. Y.: World Book Co , Publishers. (Price, by mail, 60 cents.)

Some little time since it was our privilege to revise Prof. Ritchie's School Physiology, and we are pleased to find that he has followed that excellent book by another of equal excellence devoted to public hygiene. If the children can be convinced that the various sanitary menaces, which we of the profession recognize are real and should be abated, it will be but a few years before they will be eliminated by the force of sentiment against them, for the children of today are the men of tomorrow.

Dr. Ritchie's book is of splendid excellence and should meet with the approval of the medical profession. In so far as the profession has influence it should be exerted to insure the adoption of the work by schools boards.

The Physicians' Visiting List for 1910 (Lindsay & Blakiston's). Fifty-ninth year of publication. Revised and Redated. Sizes for 25, 50, 75 and 100 patients per week. Philadelphia: P. Blakiston's Son & Co., Publishers.

This is one of two of the visiting lists which we see seem to have reached that degree of excellence which allows for little of improvement from year to year beyond the redating of pages and the correcting of dose and other tables to meet the changes of the year. This list has come to appear an old and tried friend, each new number is so like its predecessor that we fail to detect changes; it is continuously reliable and satisfactory.

An Epitome of Diseases of Women. By Charles Gardner Child, Jr., M. D. (Yale), Clinical Professor of Gynecology, New York Polyclinic Medical School and Hospital. 12mo. 210 pages, with 101 engravings. (Lea's Series of Medical Epitomes. Edited by Victor C. Pedersen, M. D., New York.) Philadelphia and New York: Lea & Febiger, Publishers, 1909. (Cloth, $1.00, net.)

It is more difficult to cover the essentials of a large subject, than to expand it in detail. To do either, an author must be master of his department. The small book requires more careful discrimination as to what is of major importance. The obvious principles are well exemplified in Child's Gynecology. It surveys the field in excellent perspective, and the student possessing himself of the knowledge offered in its pages, will have an excellent foundation on which to build his grasp of details in such a way that he will have a good command of both the principles and practices. To the practitioner it will be serviceable for quick reference.

The secretary of the Indiana State Board of Medical Reigstration and Examination has announced that rceiprocal relations in regard to physicians' licenses had been established between Indiana and New York, after negotiations extending over a year.

The Prevention of Blindness.—The special committee on the prevention of blindness of the New York Association for the Blind held its first annual meeting recently, and submitted a most gratifying report of its first year's work. This committee, which is made up of physicians and laymen , has for its object the investigation of the direct causes of preventable blindness, with the hope of eliminating such causes, and as ophthalmia neonatorum is responsible for about one-third of all blind children in schools for the blind in this country, the committee hopes, through legislative and educational measures, to practically eradicate this disease. It was recommended that a solution of silver nitrate be gratuitously distributed by the State Department of Health to physicians and midwives, and to this end an appropriation of $5,000 was made by the State. All birth certificates issued by the State Department of Health now bear the query: "What preventive of ophthalmia neonatorum did you use? If none, state the reason therefor." The educational work of the committee has been carried on by means of publications, public speaking, lantern slides, and photograph exhibits. The expense of the work is borne by the Russell Sage Foundation.

MEDICAL PROGRESS

Comprising the Regular Contributions of the Fortnightly Department Staff.

INTERNAL MEDICINE.

O. E. LADEMANN, M. D.

The Life Insurance Urine Examination.—Harrower (Amer. Med., Oct., 1909) says the examination of the urine, and especially that made for the benefit of life insurance companies is altogether too crude and not nearly extensive enough. Because of this individuals are being refused life insurance who would make excellent risks and, on the other hand, others have passed who are by no means what might be called healthy, and in fact are in a serious condition. The examination should be made by such as are skilled in this work and should be paid for accordingly. Three dollars is not an unreasonable figure. There is room for considerable improvement in the work at present done along these lines, and it is to be hoped that with frequent and persistent stimulation progress may be eventually secured.

Diabetic Coma: Is It Due to Acidosis?—Stock (Medical Record, Nov. 13, 1909) opposes the assumption that coma in diabetes is due to an acid intoxication for the following reasons: 1. A decided acetonuria occurs in the course of numerous diseases of widely different character, e. g., gastro-intestinal disorders of childhood (cylic vomiting), acute yellow atrophy of the liver, eclampsia, pernicious vomiting of pregnancy, intoxications from metals and anesthetics, etc. 2. Acidosis may occur in health on a continuous sugar free diet, and also during physiologic starvation, and during inanition from wasting disorders, such as carcinoma and tuberculosis. 3. Adyspneic coma, not unlike true diabetic is encountered in other disease than diabetes, such as measles, scarlet fever and typhoid, save for the presence of dextrose in the urine these comas could not be clinically differentiated. 4. Diabetic coma may occur without acidosis, but with a large ammonia excretion. There are quite a number of such cases in literature and they have an important bearing on the question of the origin of coma. 5. Alkali therapy has been notoriously a failure, either as a prophylactic or as a curative measure. The author believes that this failure of alkali therapy seals the fate of the acidosis theory.

A New Physical Sign.—Pottenger (Medcal Record, Oct. 23, 1909) describes a physical sign which he believes is due to a skin reflex produced by the contraction of the erectores pilorum consisting of a resistance to the paplating finger when gently pressed on the skin. In this way solid organs, as the heart and liver, and inflammatory exudates in the lung and pleura may be detected. To determine the sign it is well to begin at some little distance from the edge of the organ, or if it be an inflammation or infiltration that is to be outlined it is well to begin over presumably normal tissue and then by advancing toward the area whose limits are to be determined there will be noted a feeling of resistance when this is reached. In this manner Pottenger says the heart can easily and accurately be outlined, the liver dulness, both relative and absolute, can be determined, and the areas of infiltration in the lung can be mapped out with surprising accuracy.

Normal Auscultatory Differences Between the Sides of the Chest.—Richard Cabot (Am. Jour. of the Med. Scs., Dec., 1909) madea study of 250 healthy chests. In 67 per cent of these he noticed that the breathing at the left base was notably louder and harsher than at the right. In the majority of these it also had the quality described by the Germans as "rough."

Age, sex, the time of day, or the amount of food in the stomach apparently had no effect upon this phenomenon; yet the author found it sometimes present in the morning and absent in the evening, for reasons unknown to him. There were no differences in percussion or palpation accompanying the phenomena. Fifty normal chests examined in the lateral recumbent position gave the following differences: (a) On palpation increased tactile fremitus on the lower side; (b) on percussion, a combination of dulness with a tympanitic quality on the lower side; (c) on auscultation an increase in the intensity of the spoken and whispered voice with a slight prolongation of expiration and a raising of its pitch. Summarily stated, these signs amount to the indications of a slight degree of condensation of the lung, such as seen in the upper part of the lung when a pleural effusion is present below. When rales are present in both lungs approximately of an even number when examined in a sitting posture, lateral decubitus increases the number of audible rales on the lower side.

Spastic Paraplegia (Little's Disease).—Rhein (Am. Jour. of the Med. Scs., Dec., 1909) reports a remarkable case of spastic paraplegia dating from early childhood in a man, aged 71 years. A study of the brain and spinal cord revealed nothing of import-

ance, excepting a finenses of the fibres in the crossed pyramidal tracts. In the writer's opinion the case antidated the age of 5 years. The result of the anatomical study makes it possible that the case was one of Little's disease, although, of course, without definite history of the case, this claim cannot be definitely made. It is certainly extraordinary that an individual could live to the age of 71 years suffering for certainity the greater part of his life from spastic paraplegia, without its being possible to demonstrate more pathological change in the nervous system than the slight, and perhaps indefinite one found. These changes seem to confirm the theory that the fine caliber of the nerve cells offered resistance to the transmission of motor impulses, which for their perfect conduction, require well-formed and large nerve fibers.

THERAPEUTICS

C. W. HEPBURN, M. D.

The Therapeutics of Calcium Sulphide.—Dr. Clarence D. Ussher, physician in charge of the American Medical Mission and Hospitalat Van, Turkey, has tested calcium sulphide in certain bacterial infections and contagious diseases, and publishes the results in Medical Record for September 25, 1909. The author's field for experimentation was large. He says: "The district from which we draw our patients and in which we have the only civil hospital is larger than the state of New York and has a population probably in the neighborhood of two million. The immediate base for our observations is a hospital with 50 beds (where we have had more than 70 patients at one time), a dispensary with in- and out-patient departments, where we gave in 1907 more than 24,356 treatments and made 1,207 visits in homes; and in addition to these we have had the medical care of orphanages with more than 500 boys and girls as well as the oversight of schools with about 1000 scholars." From his experience and that of his assistants the author is persuaded that: 1. Calcium sulphide will disinfect and bring about absorption of even large quantities of pus and will prevent pus formation. For some reason, possibly nonabsorption or age of drug, it is not always specific. 2. Calcium sulphide appears to be a specific cure and contrainfectant as well as prophylactic in typhus exanthematosus, variously known as famine-fever, prison-fever, and ship-fever. 3. Caclium sulphide appears to be an efficient prophylactic for scarlet fever and distinctly modifies scarlet fever and measles. 4. It prevents pustulation, pitting, and secondary fever in smallpox, very decidedly shortens the disease, and appears to lessen if not entirely destroy the contagion, and also to act as an efficient prophylactic in the absence of vaccination. A series of cases are reported that convincingly substantiate these claims. The dose of calcium sulphide varies according to the patient and seems more dependent upon constitution than upon age or body-weight. The rule is, small doses frequently repeated to effect, then enough to continue effect. The physiological effect of calcium sulphide saturation is the odor of sulphureted hydrogen from the skin and breath, not belching from the stomach.

The Best Hemostatic.—The ideal hemostatic, writes Dr. William F. Waugh in Medical Standard for November, 1909, is one that acts quickly and powerfully, certainly checking every variety of hemorrhage, as occurring in patients of any age and constitution. So far as this can be acomplished by any drug acting systematically and not locally, atropine fills the indications. It acts as a hemostatic by forcibly stimulating the vasodilators, actively dilating the blood vessels, especially the capillaries, and drawing into them so much of the body's blood supply that there is not enough left to flow from the open vessels. There is here an active increase in capillary attraction, so much so that it would be impossible for the opened vessels to absorb air instead of allowing their blood to escape. Since the capillary system has a capacity for blood 700 times greater than that of the arterial system, it is easy to appreciate that a slight increase in capillary attraction for blood would suffice to cause a blood scarcity in the rest of the circulation. Atropine has proved effective in every form of hemorrhage, except that due to the erosion of a large artery. To obtain the hemostatic effect of the drug, a full dose, or a toxic one, should be given. This must be comprehended or failure will follow the use of ineffective doses. It is best to administer at once, to an adult, a milligram of atropine hypodermically, and to follow it with similar doses as may be required. The delirium often following toxic doses is a minor consideration in such emergencies. No adjuvants are required, unless it may be the addition of glonoin to open the vessels, and by letting the atropine more quickly into the circulation hasten the action of the latter. The author appends a number of reports from professional friends, showing what at-

ropine has done for them in all forms of hemorrhage, which sustain his views and show the wide range of action of the remedy.

The Treatment of Suppurative Peritonitis Following Appendicitis.—Dr. Ezra C. Rich, in Utah Medical Journal for July, 1909, says that the treatment of peritonitis has made decided advancement in the last three or four years. Formerly the statistics of our best hospitals registered a mortality of from 70 to 80 per cent, while today the present methods of treatment have reduced the mortality to about 10 per cent. The treatment of peritonitis, like that of other diseases, has passed through its phases of evolution. Thirty years ago we had the opium treatment; later the treatment by saline laxatives; then the operative and irrigation treatment. Theoretically, the latter method appeared to be a step in the right direction, but clinical observation demonstrated the impossibility of cleansing the peritoneal cavity of infection by irrigation, for with it we wash away the lymph barriers nature sets up to stop the spread of disease, dilute the poison and spread it to every part of the abdominal cavity. We are indebted to Fowler, Ochsner and Murphy, collectively, for the rationale of the present-day treatment, which generally may be said to be as follows: Raise the head and shoulders of the patient, wash out the stomach if there is nausea, vomiting or distension over the epigastrium. If the patient's condition will warrant, give an anesthetic and remove the appendix; put drainage above the pubis down into the pelvis, treating the peritoneum as any other abscess cavity, without manipulation, sponging or irrigation. Stop all food by the mouth, administer opium in some form, hypodermically, to control the pain and stop peristalsis, thus preventing poison from being disributed by the movement of the small intestines, and administer large quantities of saline solution through the rectum. The author discusses Murphy's method of treatment, quoting it in detail, and gives the clinical history of 10 cases.

Epsom Salts-Antiphlogistic Lotion.—In a communication to Medical Council for October, 1909, Dr. Thomas W. Musgrove tells of the value of a lotion of epsom salts—half an ounce to a pint of hot water—in reducing the swelling of sprains, bruises, and dropsy of the legs and feet from any cause. He says: "Make a sufficient quantity of the solution to soak flannels in and wrap the swollen parts with the hot, wet flannels. Keep the parts fomented for twelve to fourteen hours, and the swelling will disappear in almost every case. I have used it many times and it has not disappointed me yet."

Chronic Colitis.—In California State Journal of Medicine for September, 1909, Dr. Dudley Fulton gives a resume of 158 cases of chronic colitis, of which 154 had chronic constipation. In 131 of these the constipation was of the spastic variety. Atonic constipation had existed from a few months to fifteen years before the spastic stage had developed. With the onset of the latter, most of the patients could date the beginning of colitis symptoms. Instead of colitis being a neurosis secondary to general neurasthenia and nervous irritability, as is usually taught, we believe the interpretation of the relationship between the two should be that in a neurotic individual with high reflexibility of his nervous system, atonic constipation will develop into spastic constipation sooner than in a person with a more stable nervous organization. In the latter, a tonic constipation may exist for years or decades without further trouble than simple constipation, while in a neurotic person atonic constipation may develop into the spastic stage within a few weeks or months, with its associated chronic flatulence, abdominal distress and evacuation of mucus, which are never chronically present in atonic constipation. The symptomatology consisted of constipation, mucus, flatulence and abdominal distress, besides a large number of reflex, nervous, dyspeptic and circulatory disturbances too numerous to mention. Upon the principle that in the large majority of cases chronic colitis is a superficial catarrh of the large bowel which accompanies chronic constipation, treatment was directed to the cure of the latter. Contrary to usual practice no treatment was directed primarily to the nervous system. The so-called neurasthenia, etc., disappeared with the colitis and constipation. Effort was also made to restore the abdominal pelvic organs to their normal relations, when indicated. The results were: Twenty-eight of the 158 cases have been lost sight of and are therefore not included in the tabulated results. Of the 130 cases whose after history is known, 18, or 14 per cent, received no benefit at all, or soon relapsed after the cessation of active treatment. Thirty-six, or 28 per cent, were greatly benefited, by which is meant, freedom from symptoms, except following occasional temporary return of constipation. Seventy-six, or 58 per cent, have remained well. It is the author's experience

that if he can cure the constipation, he can cure nearly all cases of colitis.

One or two oranges eaten daily, before breakfast, it is stated, will prevent constipation.

Dr. William J. Robinson, editor of the Critic and Guide, the American Journal of Urology, Therapeutic Medicine, has purchased the Chicago Clinic which has had an uninterrupted existence for twenty-three years (though known during the past year under the title of Practical Therapeutics) and has consolidated it with the Therapeutic Medicine. The consolidated journal will be published monthly and it is believed that under the active editorship of Dr. William J. Robinson it will become one of the strongest and most important medical publications in anemia. The publication is located at 12 Mt. Morris Park, W., New York.

American Guild of St. Luke.—This is the name of a society which was recently organized in New York. It is composed of physicians, and it will become affiliated with similar societies in other countries, especially those of France and England. The special field of work of these societies is the cultivation of the ethical, moral and historical principles upon which the practice of medicine is founded and the collection of historical data relating to medicine. Dr. Charles A. Nammack was chosen as the first president of the new organization; Dr. Thomas Addis Emmet and Dr. Jose M. Ferrer as vice-presidents; and Dr. Thomas F. Reilly and Dr. James J. Walsh as secretaries. At the first meeting of the organization Dr. Walsh read a paper on St. Luke as a Physician.

Work of the Marine Hospital Service.—The summary of transactions of the Public Health and Marine-Hospital Service for the fiscal year of 1909 shows that during the year no further cases of human plague occurred in San Francisco, but that 4 cases of rat plague were found, the last on October 23, 1898. There were 156,059 rats caught, of which 93,558 were examined. In Oakland no human plague occurred until October 6, when a case was reported that had received its infection in Contra Costa county. In Los Angeles, August 11, 1908, a case of human plague was discovered, and soon after an infected ground squirrel was found. No case of human plague was discovered in Seattle, but out of 48,652 rats examined, 10 were found infected. A widespread plague infection among ground squirrels was found in Contra Costa county, and up to October 30, 44,843 squirrels had been destroyed. During 1908, 111 deaths from rabes were reported, from 534 infected localities. The disease prevailed in 38 states and territories in the eastern three-fourths of the United States, but no cases were reported from the Rocky Mountain or Pacfic Coast regions. The report also deals with the investigations now being pursued on pellagra and the hookworm disease. The leprosy investigation station at the Island of Molokai, for which $100,000 was appropriated, is now completed and ready for occupancy. At this station experiments on animals, in which quantities of leprosy material are required, will be carried on but the investigation of incipient cases will be continued at the temporary laboratory in Honolulu. The problems which leprosy present include the successful growth of the lepra bacillus on artificial media, the successful inoculation of the lower animals, the discovery of a substance analogous to tuberculin to be used as a remedial or diagnostic agent, the discovery of the mechanism whereby the infection spreads from one person to another, and lesser problems that add to the knowledge of the disease, and while apparently of no great immediate importance, may indicate the path leading to the solution of the greater problems. During the year 24,657 cases of smallpox were reported with 75 deaths from 42 states, 1 territory, and the District of Columbia. The additions to the hygienic laboratory, which treble the capacity of that institution, were completed during year, and nine bulletins were issued. The publication of a series of bulletins embodying a digest comments on the Pharmacopeia was undertaken. There were 966,124 immigrants inspected during the fiscal year, 14,536 of whom were certified for rejection on account of physical defects. At the hospital for immigrants, Ellis Island, 6,186 patients were admitted for treatment during the year. In the 21 marine hospitals owned by the government and at the 126 others stations, where seamen of the merchant marine received hospital and dispensary treatment, there were treated during the year 53,074 patients. Physical examinations were made of 4,980 persons connected with the various branches of the service. The personnel of the service at the close of the fiscal year included the surgeon-general, 5 assistant surgeon-generals, 35 surgeons, 66 passed assistant surgeons, and 21 assistant surgeons. There were also 279 acting assistant surgeons and 45 pharmacists.—Jour. A.M.A.

SOCIETY PROCEEDINGS

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

Thirty-Fifth Annual Meeting held at St. Louis, October 12-14, 1909.

(Continued from page 516.)

Latent Duodenal and Gastric Ulcer.—Dr. Willard J. Stone, of Toledo, said duodenal and gastric ulcers were more common than was supposed. Most of them were masked under the symptoms and diagnosis of functional hyperchlorhydria. The acute forms, with severe recurring hemorrhages, in certain cases demand surgical interference, although such patients were in an extremely critical condition and the surgical risk extremely hazardous. Many recovered under medical care. Perforation demanded, first of all, early diagnosis. Fully 60 per cent. were wrongly diagnosed as appendicitis, ruptured gall bladder, intestinal obstruction, or acute peritonitis, not stating the cause. The earlier the interference the better was the result. Goldstucker, who had recently reviewed 236 cases of perforation, found that of thoses operated upon within the first twelve hours the mortality was 29 per cent.; after twelve hours the mortality was 54 per cent. Robson found among 155 cases of perforating ulcer in the literature to 1907 that the mortality among those operated upon buring the first twenty-four hours was 37.7 per cent; after twenty-four hours the mortality was 85.5 per cent. In about one-fourth of the cases in the literature of perforating duodenal ulcer no previous dyspeptic symptom suggestive of the condition had existed. Fully 75 per cent. of uncomplicated ulcer of duodenum or stomach were cured by medical means, the remaining 25 per cent. became chronic, and might be classified under (1) chronic ulcer with active symptoms, such as pyloric spasm, scar contractions, perigastric adhesions, or malignant transformation; (2) chronic ulcer with latent symptoms, which might be defined as that type which gave rise to periodic attacks of distress at the height or end of gastric digestion and simulated in a large percentage of cases neurotic or functional hyperchlorhydria. Hemorrhage or vomiting was not necessarily a symptom of chronic ulcer. The attacks were periodic, lasting a month or two, with recurrence after two or three months. The distress was relieved by taking food, milk, or alkali. Supersecretion, which was a far more important diagnostic sign than hyperchlorhydria (which existed in about one-half the cases), was practically always present. The finding of 50 to 100 c.c. hyperacid secretion in the fasting stomach was extremely suggestive of ulcer. Patients often complained of raising a mouthful of acid secretion from the stomach when the organ was supposedly empty. Elaborate laboratory investigations were not necessary. The longer the pain was relieved by food, the more probable was the lesion duodenal rather than gastric. The typical pain of chronic duodenal ulcer occurred from 3 to 5 hours after a meal. Pyloric stenosis in infants, when due to pyloric spasms from hyperacid contents, (not the true congenital stenosis due to hyperplasia) might be the result of reflex irritation from a pyloric or ulcer. In an infant of six weeks dying in thirty-six hours with symptoms of laryngismus stridulus and pyloric obstraction, an ulcer one centimeter in diameter was found in the duodenum just below the pyloric ring. The differential diagnosis in general excluded cholelithiasis, and, in particular, functional non-organic hyperchlorhydria. Chronic ulcer of duodenum and stomach was not, as a rule, cured by medical means. Such patients might however, barring the contingency of severe hemorrhages or perforation, be fairly comfortable with a carefully regulated diet and appropriate medical treatment. If these measures failed after a reasonable time, surgical aid offered the best hope for cure when performed by those experienced in the surgery of the upper abdomen.

Dr. A. J. Ochsner of Chicago said our attention had been directed constantly to the fact that we must look for gallstones, without complications, without the impaction of the stones in the ducts, whenever a patient complained of gastric symptoms, and that we could count on an early diagnosis in the majority of cases from now on. The mortality which followed operations for the removal of gallstones was small now as compared with what it was six or eight years ago. At that time patients were operated on who were suffering from cholangitis. Another reason why the mortality was small now that fewer harmful things were done during the operation. The gallstones were simply removed and drainage established.

Dr. R. A. Bate of Louisville said if we went back to the orgin of gallstones, there was absolutely no reason why medicine should not remove every gallstone which was composed of 90 per cent. cholesterin. If the gallstones were differentiated, those that contained bilirubin calcium in greater porporthan 10 per cent. might require surgical interference. Gallstones were formed in the gallbladder and in the ducts in very much the same way as mucin, and when stagnation of bile occurred the mucin, caused

puterfaction of the bile, and this, in turn permitted the mieroorganisms, which were not very hard to overcome, to pass up, and wherever cholesterin was deposited by the lecithin being broken up, the lecithin held the cholesterin in solution. There were three factors to consider in connection with gallstones: Microbes of various kinds, alkalies, and the acids.

Dr. H. Tuholske of St. Louis said that a fairly large personal experence had taught him the important lesson that a gall-bladder with stones in it could be relieved when the stones were mechanically taken out. He had spent considerable time at the great Mecca of the gallstone sufferers, Carlsbad. He had heard people say that there were enough gallstones passed in Carlsbad to pave the streets with them. He came in contract with the best men of the profession there, had talked with them about gallstone cases, and he was sorry for any man or women who had a gallstone that went traveling and left its comfortable little bed in the gall-bladder, for then trouble was likely to began. There was danger of lodgment in the narrow duct. There was danger of ulceration and perforation. Then came all the obstructive symptoms, the adhesions which muddled the picture and produced a serious condition. Where the gall-bladder was in a fair condition the dangers incident to the removal of the stone or stones was not great. The presence of gallstones not infrequently caused a change in the epithelium of the gall-bladder, and we might find the typhoid bacillus as a nucleus in the gall-bladder. All things considered, when a diagnosis of gallstones was made, it was better for the individual to have the stones taken out.

Dr. Daniel N. Eisendrath of Chicago said that while olive oil had its function, there were cases where, either through some condition of the patient or complication, or some voluntary objection to the operation, the patient would not consent to operation. Such patients were benefited temporarily by olive oil and the Carlsbad waters; but let there be obstruction produced by the gallstones, or let there be retention of secretion, one found a hyperemia and all the pathological processes incident to obstruction. What happened? There were cases of gallstone in which the common duct stone became inpacted, stayed so for a few days or a few weeks, and went back again. Fenger called attention to this under the head of intermittent jaundice in connection with common duct stones. Carcinoma not infrequently developed from the constant mechanical irritation of a gallstone or gallstones. The only reliable and satisfactory treatment for gallstones was to remove them.

Dr. J. Henry Carstens of Detroit said it was an outrage for a general practitioner, or for a specialist in gastrointestinal diseases, to treat patients month after month and year after year in different ways, without making a correct diagnosis. It would redound to the credit of such men to say, when they were in doubt, "I do not know whether you have duodenal ulcer or ulcer of the stomach, and I think you ought to go to an abdominal surgeon, who can make a small opening and find out whether you have gallstones or not. If you have, they can be taken out. On the other hand. if it is an ulcer, it can be excised, the opening closed, and a cure effected."

Dr. Thomas B. Noble of Indianapolis said several years ago he had the privilege of doing a pelvic operation which necessitated a suprapubic incision. During this operation he discovored two stones the size of marbles in the free gall-bladder. Directly thereafter that woman was given phosphate of sodium for one year. For another year she took olive oil three times a day, after which she was seized with intense pain, due to stone blocking the cystic duct, and an infected gall-bladder. He had to do an emergency operation, and he found these stones of the same size and the same character that they were two years previously, Previous to that time he was not very much in favor of medical treatment in cases of preformed stones, and he was less so now.

Dr. Richard A. Barr of Nashville said olive oil must be brought in contact with the gallstones to do any good, and one might as well rub olive oil on the outside of the abdomen as to give internally, so far as any effect it would have on preformed gallstones was concerned.

Dr. M. C. McGannon of Nashville said a member of the medical profession came under his observation two years ago as a patient who had had persistent jaundice for three months. It was not accompanied by pain. He was quite yellow at the time he came under observation. He had lost flesh, and it was thought that he might be suffering from cancer. A diagnosis of cancer had been made by a very good internal practitioner. When the man came under observation Dr. McGannon was quite willing to agree with the internist in the supposition that it was a case of cancer, but the patient, being a doctor, he put this argument befor him: "If this is a cancer, you will certainly die from its effects. If it is not cancer, and you submit to an operation, we may be able to give you relief. If we do not give you relief, we

at least will do you no harm. We will not shorten your life with an exploratory incision to determine the character of the trouble." The operation was consented to and performed. The gall-bladder was found to be completely shrunken, the duodenum involved in a mass of adhesion bound down into a knuckle formation about the gall-bladder and liver. The breaking up of the adhesions was effected with a great deal of difficulty. The stomach was opened in the dissection, but closed at the time. The breaking up of the adhesions relieved the condition. The gall-bladder was removed, and today that gentleman, after four years, is able to ride horseback, and is practising medicine in the State of Tennessee.

To Investigate Pellagra in Illinois.—Governor Deneem, of Illinois, has appointed a committee to investigate the outbreak of pellagra in the state, The committee consists of the following members: Dr Frank Billings, president of the State Board of Charities, Chicago; Dr. George W. Webster, president of the State Board of Health, Chicago; Dr. Howard T. Ricketts, of the University of Chicago; Dr. Oliver S. Ormsby, of Chicago; Dr. H. Douglas Singer of Kankakee; Dr. Harry Sands Grindley, of the University of Illinois; and Dr. W. J. McNeal, of the University of Illinois.

Who Are the Unfit.—Charles E. Woodruff, of New York, contends that unfavorable climatic factors are causing unfitness for survival in emigrants to this country. This occurs among those who have lived in more northern countries, where the light is not so strong as in these southern latitudes. A preponderance of blondes is found in criminals, and this results from a physical degeneracy and nerve exhaustion influenced by their unfitness for this climate. The darker races get along better and show less percentage of crime, outside of murder, surviving in health and being able to support themselves and their families, while the brainy, brawny northerner succumbs and becomes an inmate of the poorhouse or the jail. The latter are much more addicted to the use of liquors than the former. The present survival of criminals and nervous wrecks in the blondes will continue as long as the physician does not warn them of their necessarity of adjustment to the climate. The author illustrates his statements by statistics drawn from the records of the New York State prisons.—Med. Record.

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The Anemia and Chlorosis of Women.—(Dr. L. H. Warner, M.D., Ph.D., Brooklyn, N.Y.)—How frequently are we consulted by young girls just entering upon the period prior to puberty, where we note an impoverished condition of the blood, and resort at once to tonic treatment. Do we consider that the metamorphosis of a girl into womanhood denotes structural and functional changes causing noted alterations in the blood current? What, if any, symptoms do we recognize? Paleness, complete lack of energy, loss of appetite, loss of sleep, and

we also learn upon investigation that loss of weight accompanies these conditions. In the majority of cases, we learn that our patient is just approaching the stage of puberty, that menstruation has occurred for a year or two past, but has suddenly ceased. Vitality is ebbing, digestive disturbances, sleeplessness and fright appear and loss of appetite and loss of interest in all surroundings become factors. The natural diagnosis in such cases, provided the lungs prove normal, leads to chlorosis, reversedly to incipient phthisis pulmonalis, provided the expectoration shows the presence of the tubercle bacillus or other pathological factors. The latter being excluded, we find a blood poor in coloring substance (hemoglobin), but it remains for a count of both the red and white cells to compare with the hemoglobin percentage to make a differential diagnosis between chlorosis and anemia. Our efforts should not stop here, for knowing the effect is not knowing how to remove its cause. No disease exists excepting there is some degree of anemia or chlorosis, as the case may be. Learn the true definition between anemia and chlorosis. The former means an equivalent decrease of hemoglobin and red cells, while the latter exhibits one-third less hemoglobin than red cells. The underlying cause of any one of these truly pathological conditions can only be determined by a pathological count of the stained blood specimen. In all of these cases a gynecological examination will reveal a small and ill-developed uterus, a demonstrative fact that the blood does not bring sufficient nourishment to this part of the human organism, and this being the case, menstruation becomes irregular, insufficient or ceases entirely. The above findings having led to a diagnosis, the question arises: How can this anemic or chlorotic condition be corrected? As a natural result of our teachings we resort to the various iron tonics, forgetting for the moment that physiological chemistry was in its infancy, if at all known, when we were equipping ourselves with armamenture with which to fight disease; and, again, we are prone to forget that the knowledge of hematology is one of the most recent medical sciences, a science which is bound to rise to the horizon of medical achievement in the most brilliant lustre. Is it not a fact that we are able to recognize typhoid malaria, etc., while examining the blood, and is it not a fact also that this knowledge was imparted to us but a few years ago? Is it not a fact that we may observe the physiological action of any therapeutic agent in the blood? And why then should we hold unto the teachings of the ancients that iron in any form is a true tonic? In order to regenerate blood, two things are necessary: First—Restitution of the protoplasm of the red corpuscles; and secondly, the restitution of the hemoglobin. We all known that the liver, spleen, muscles and other organs of the body hold a deposit of iron. Withholding iron from these tissues means grave anemia and subsequent death. Now, what is the physiological action of iron salts? We learn that they decompose all substances in the intestinal tract which precipitate all iron of food, making same absorbable. This statement occasionally receives corroboration by apparent clinical results. The idea of giving aid to the tissues by means of medication must be met by definite results; it requires total resorption and not part resorption and part elimination. How large an amount of iron is stored within the human organism, is the question which should concern us most, rather than give iron medication in quantities, far in excess to the total amount of iron the body is supposed to hold. Excessive medication means deranged digestion and the latter leads impoverished tissues. A further point to be considered when resorting to iron medication is the effect such medication will have upon the eliminating channels. We must use a soluble iron and if possible in combination with some such preparation as malt extract.

Johan Hoff's extract of malt with iron represents an ideal form of malt and iron combined. In it we have the nutritive value of malt combined with peptonate of manganese and iron. This product is presented in liquid form, and its solubility is easily proven by the potassium ferrocyanide test for iron, the ammonia separating and redissolving test, the copper test for peptone, etc. Although I known of many cases in which various iron preparations seemed to effect a slow cure, I found invariably that some digestive disturbances occurred. In twenty cases of young women in which the physical examination revealed similar conditions, aged from 16 to 19 years, appearing profoundly anemic, female organs normal in relation but undersized, menstruation stopped suddenly, headaches, malaise, etc., Johann Hoff's extract of malt and iron in wine glassful doses three times daily gave the most satisfactory results. None of the patients were troubled with constipation, menstruation returned in from 23 to 37 days, appetite returned, blood improved and all of the cases were discharged from medical care within 44 days. I may mention that patients were instructed to continue

using Johann Hoff's extract of malt with iron in wineglassful doses three times a day.

Before we proceed to recite in detail the history of the cases herewith recorded, it may prove of interest to explain the function and histological changes of the various white corpuscles. All food or medication taken within the organism undergoes a great many chemico-physiological changes, beginning when coming in contact with the saliva and ending when being finally taken up by the leucocytes after having been resorbed by the lymphatic channels. Converted by leucocytes into tissue pabulum everything becomes available as tissue food and the physiological action of any food or medication exhibits itself by its influence upon the histological structure of the white blood cells. The youngest of all white corpuscles are the lymphocytes, first the young, second the old cells. The latter gradually change into young, and subsequently normal or aged mono-nuclear leucocytes. While in this form the white cells are most active, but their degeneration begins when they transform into polynuclear leucocytes. The nucleus begins to break and is no longer able to perform its function. Should the polynuclear leucocytes exhibit basophilic or neutrophilic granulations, then infectious or malignant disorders are present. The excessive presence of eosinophiles indicates severe nervous disorder.

Case: F. McN. (May 15th)—Age 37; houseworker; complains of general malaise, loss of appetite and weight; menstruation pale and small; blood examination reveals; hemoglobin 51 per cent, red cells 3,000,000, white cells 7,400. Diagnosis: anemia. Is placed on pil ferruginous (Blaud). No improvement noted in two weeks; bowels constipated, severe headaches. Is placed on Johann Hoff's extract of malt c. iron, wineglassful 3 times daily, Improvement is noted at once, bowels had been regulated and no constipation is noted. Patient has sufficiently recovered by June 21st to permit her return to duties. Blood examination reveals: hemoglobin 74 per cent, red cells 4,000,000, white cells 7,300.

Case: A.W. (May 15th) Age 29; saleswoman; complains of weakness, headache, lack of ambition, loss of appetite, sleep and weight. Appears very pale, expresson listless, pulse feeble, respiration normal, menstruation pale and hardly noticeable, bowels constipated. Has been taking Blaud's pills. Blood examination reveals: hemoglobin 56 per cent, red cells 3,350,000, white cells 9,300. Is placed on Johann Hoff's extract of malt, wineglassful three times a day. Improvement is noticed within a few days and recovery is rapid. Constipation ceases, ambition and appetite return, menstrual functions normal, pulse normal, and strong. June 21st blood examination reveals: hemoglobin 74 per cent, red cells 3,910,000, white cells 7,300. Patient is advised to continue treatment for some weeks.

Case: J.F.F. (May 15th)—Age 37; houseworker; complains of severe rheumatic pains all over body, history reveals syphilitic infection. Has been taking iodides and mercury. (Salivation noticeable.) Blood examination reveals: hemoglobin 43 per cent, red cells 3,906,000, white cells 9,700.

Diagnosis: chlorosis syphilitica. Patient is ordered to discontinue all previous treatment and take wineglassful doses of Johann Hoff's extract and iron 4 times daily. Improvement follows rapidly and June 21st blood examination reveals: hemoglobin 62 per cent, red cells 4,305,000, white cells 8,100. Patient now returns to mercurial treatment in conjunction with Johann Hoff's extract of malt and iron.

Aside from this remarkable improvement both in the blood and clinical condition of these patients, I invite your attention to the study of the leucocytes. The history and observation of these cases thoroughly demontsrate the value of Johann Hoff's extract of malt with iron as a reconstructive tonic.

To Cure a Corn.—The Chemist and Druggist says that Unna's way of treating a corn is as follows: A ring of glycerin jelly is painted around the circumference of the corn to form a raised rampart. A piece of salicylic plaster mull is then cut to the size and shape of the central depression, and applied to the surface of the corn. This is then covered with a layer of glycerin jelly, and before it sets a pad of cotton-wool is applied to the surface. This process is repeated as often as is necessary, until the horny layer separates and is cast off.

To Overcome the Craving for Alcohol.—Rankin (Monthly Cyclopedia and Medical Bulletin, September, 1909) says that to assist a patient to accomplish a total abstinence from alcohol, in cases of an established alcohol habit, and where other treatment is being prescribed, the following pill is helpful:

℞ Extract of hydrastis..... gr. ij
Extract of belladonna .... gr, 1-12
Capsicum ..... gr. 1/8
Strychnine ..... gr. 1-12
M. ft. pil. No. 1.
Sig.: One three times a day after meals.

No Uncertainty Now In Digitalis Medication;

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Medical Journal Advertising Pays.—Dr. Katherine L. Storm, of Philadelphia, is said to be the most extensive individual medical advertiser in this country. The fact that the doctor uses medical magazines exclusively, and employs no traveling salesmen, places the entire credit for the immense business that she enjoys, in the hands of the medical publications.—Medical Herald.

A Notable Advance.—The manufacturers of Burnham's soluble iodine are justly proud of the record it has made in the past eight years and consider that record as incontrovertible proof of the sterling merit of the preparation; that its value is now recognized by many of the highest authorities in the medical profession is but the logical outcome of the provings of the statements made by the manufacturers regarding this product. The field for iodine is a wide one and when, having found that soluble iodine meets every indication for the iodine therapy, without the disturbing sequelae that follow the use of the iodides and other iodine compounds or solutious, it is welcomed addition to materia medica.

Of Direct Interest to Physicians.—"Hot Springs Therapy" may seem to be a new expression to physicians and scientists who have, through lack of information, supposed that the benefits obtained by thousands of patients at Hot Springs annually, came from the heat effect or water effect of a merely hot bath. If that were true hot baths anywhere would have the same effect. On the contrary the "Hot Springs effect" is not due to hydrotherapy or thermotherapy but to radio-activity. This water is highly radio-active, due to the presence of a radio-active gas which is lost upon long exposure or re-heating of the water. The immediate effect of this radio-activity of the water upon a human subject partially or wholly submerged therein is increased cell activity, known in science as increased metabolism. This increase in metabolism is not given by hydro or thermo-therapy, it is sought by physicians in a class of drugs whieh they call alteratives but it is in no way to be obtained in like degree but through "Hot Springs Therapy"—now, is the new expression justified? The increase in metabolism is shown in the same way and just as promptly as when a furnace draft is opened. Then ensues an increase in combustion and an increase in the production of heat; in the subject in the Hot Springs bath the increased metabolism, which means several things, one of which is increased combustion, is promptly shown by a rise of temperature, going up one, two or even three degrees, depending partly upon the patient's condition but more upon the amount of stale water from open cooling tanks which has been used to temper the fresh hot water. As has been mentioned, this radio-activity is lost when the water is long exposed in open tanks. So if water cooled in such manner is used to temper the bath very irregular effects are obtained as sometime the water is more stale than at other times. The trouble has been obviated at the new Park Hotel Bath House for the first time in the history of Hot Springs by the installation of a system of refrigerating coils. So the water at this bath house is no longer cooled in open tanks but in closed pipes and is delivered cool at the tubs with no loss of the radio-active gas which is the whole source of "Hot Springs Therapy." This will result in a regularity of effect in the production of increased metabolism not to be obtained elsewhere. Increased metabolism causes: 1. Increased assimilation, increase of red blood, increase of strength, increase in weight. Eighty per cent of the people bathing at Hot Springs gain in weight unless the baths are especially ordered and conducted on a depleting plan. A pound gain per day is frequently seen and a gain of twenty pounds in ten days has been recorded. 2. Increased elimination, not only does this take place through the skin during the bath but the iucreased cell activity in all parts of the body prepares retained poisons for elimination through skin, kidneys, liver and bowels, often throwing so much effete material into these excretory organs that they must be aided by diuretic waters and purgatives to carry it off. 3 Another effect not directly a part of increased metabolism is a lowering of blood pressure in the arteries. The normal blood pressure will support a column of mercury 125 to 130 millimeters in height. When from disease the blood pressure rises as it does, sometimes to over 200 mm. anyone can understand that there is always trouble and often danger. The carbonated bath is used the world over to reduce blood pressure and many patients with hardened arteries go to Germany for the Nauheim bath, not knowing that the bath at Hot Springs lowers the blood pressure 20 mm. on an average. A fall of 50 mm. during a single bath has been noted. Not only these effects of Hot Springs Therapy are to be obtained at this new Park Hotel bath house but also every hydro and thermo-therapeutic effect obtainable anywhere. The new equipment carries with it every modern apparatus in these lines, showers, needle baths, spinal and perineal douches, the sitz, etc., etc., all controlled from a central table in charge of a trained hydrotherapeutist. Another improvement introduced in this new bath house is the institution of a superintendent of the Bath House in each branch of this establishment. Attendants are used to give the baths and to handle the bathers but every step is carried out according to the bath directions and under the watchful eye of the superintendents, a man and a woman trained in the use of instruments of precision.